

Aviation News

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AUGUST 5, 1946



Beech Bonanza Model 35: The new four-place all-metal 165 hp. Bonanza, announced last week by Beech Aircraft Corp., is designed primarily for business and air taxi use. Equipped with novel butterfly tail and electric tricycle retractable landing gear, the Model 35 requires rudder controls only in cross wind landings or takeoffs. See story on page 13 (Hans Groenhoff photo)

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UAL would apply deduction tariff; ATA asks \$2.50 minimum charge.....Page 34

Washington Observer



PLenty of RUSSIAN V-2s—First reports of mysterious rocket flights across Sweden are not surprising to top AAF intelligence officers. They point out privately that whereas the U.S. opposed (nearby only 25 V-2s German missiles), Russia took over the complete and undamaged Nazi V-2 manufacturing base near Nuremberg, plus tens of thousands of experienced missile

GENERALS AND AIRLINES—The tales of ground-to-high altitude posts has the industry thinking. Some admirably will not strike up-flight encounters. But they have many influential friends in strategic countries, and some know foreign airways and operating conditions. One general argued he has excellent insight into location of considerable stocks of aircraft spare parts at various Army air bases throughout the world, which will be badly needed by the nations before long to keep much utilized equipment flying.

PLANNING OUR DEFENSE WEAPONS—AAF's plan for protecting the nation are based on three assumptions: (1) An enemy will strike the first blow; (2) We shall have an allies capable of necessary assistance of any consequence; (3) US AAF operations will be confined to immediate defensive and counteroffensive measures. Determining in advance the nature of our defense action is the crux of the problem before us only the AAF high command, but the entire War and Navy Departments. To devise missiles capable of detecting, tracking and destroying enemy units is an intensely greater technical task than creating weapons designed only for attack.

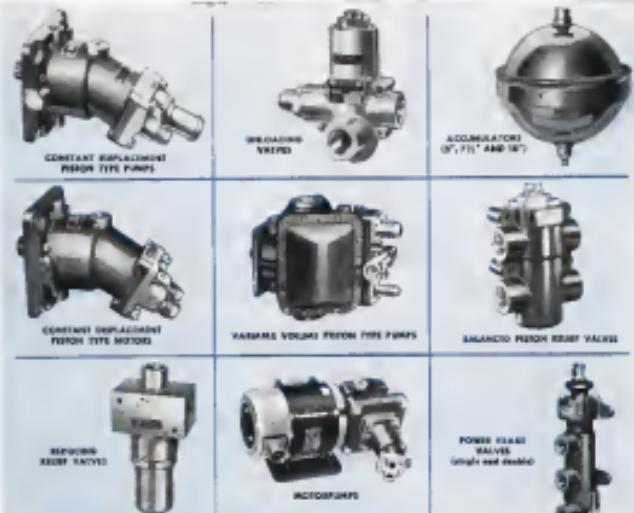
BUSH FREIGHTER AND FOREIGN TRADE—Commerce Department officials were authorized to receive a report from one of our South American neighbors the other day concerning delivery by the British of several brand new Dragon Rapide, a 130-mph twin plane designed at least 15 years ago and thought to have been removed from the market. The truth is that the buyers found an American plane suited to South American environment conditions. The British delivered the goods. US manufacturers, except for Northrop, continue to ignore the world-wide demand for a heavy-duty, slow-flying work horse for South America, Canada, Alaska, South Africa, and other undeveloped areas of the world. Northrop is working on a transoceanic model which may be the answer.

HART GOES OUT FIGHTING—Ex Adm. Thomas Hart's own song in the States, apparently, was a final blar in the Army Air Forces. It's theme the "high pressure" propaganda machine of the AAF, focused at the taxpayers' expense. While the Navy, Hart proposed, concentrated on fighting the war, the AAF was starting its propaganda machine for a merger of the armed services and AAF autonomy.

600 CURTISS COMMANDOS—With more after surplus transports in their supply, special interest围绕着公私合作的合同。CAA and War Assets Administration officials on possibility of special certification of the Curtiss C-46 Commando, the largest twin-engine transport. There are 600 of these planes in surplus. None new is eligible for utilization. Less than 15 of the last model have been personnel certified, and 10 of these were bought by Skycraft Airways. Changes for adding all or part of this big batch of commercializing the present fleet of the scheduled lines—the national air transport system appear better than 50-50.

AVIATION LOSES BORIN—Rep. Lyle Borin's addition to the Oklahoma Democratic primary results as an unseated member from the House Interstate & Foreign Commerce Committee, which will write comprehensive antitrust legislation next year. Borin was one of the most aggressive backers of the bill to reorganize the Civil Aeronautics Board. He was killed in a car accident in 1945, which was ruled chiefly by railroad interests.

HUSH-HUSH AGAIN—Army and Navy command to play down "I spy" security game as the most illegal behavior at the 8th annual sunbomb meet. Outstanding instance was the showing of "Rearmageddon" motion picture of the July 1 air battle to correspondents aboard the U.S.S. *Admirable*. In the role of foreign correspondents were A. M. Klaklov, identified as a Russian Navy Captain, and other foreign representatives. Correspondents were told that in news stories they could not refer to the picture as "rehearsed," but could say only that they viewed "unrehearsed" pictures of the blast.



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Here is the most complete line of aircraft hydraulic equipment for 3000 psi operating pressure. Among many other advantages, it gives aircraft manufacturers and airlines the benefits of undivided responsibility for the hydraulic equipment. Vickers Engineers will be glad to discuss with you the desirability of using 3000 psi hydraulic systems on your airplanes.

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B. F. Goodrich bladder-type fuel cells for eight uses the economy power. By preventing gasoline leakage through the hoses (which can happen with metal gasoline compartments), these cells add a new factor of safety and save many hours of maintenance.

Reducing low economies are important cost factors. Insulation of B. F. Goodrich bladder cells is a simple mat-

ter of folding them up, packing them into the tank cavity and trapping them into place with button fasteners.

B. F. Goodrich builds these cells in layers of synthetic rubber and nylon fabric. They are specially designed for roughness and high abrasion resistance, yet they are completely flexible. Cells have been developed covering weight and strength requirements for all types

of airplanes—from paperthin tanks for light loads to high strength, large volume tanks for big transports. All guard against leakage, at all shock resistance, at full down maintenance.

B. F. Goodrich cells should be designed into new ships, they can be adapted to many ships now flying. For facts, write to The B. F. Goodrich Company, Ammunition Division, Akron, Ohio.

B.F. Goodrich

FIRST IN RUBBER

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August 5, 1945

AAF Assuming Control of Vital Guided Missile Development

Research on air-to-surface projectiles pushed in five fields as AAF and gives air force leading role in new type warfare.

Despite the existing differences of opinion and development of guided missiles between the Ordnance Department and the Army Air Forces, AAF has assumed the largest role following acceptance by Maj. Gen. Henry S. Arnold, General Staff chief of research, of the AAF's interpretation of the directive.

Because of a growing conviction on the Army that future war will be fought primarily in the air, and that the essential airplane as it has been known is dead, AAF promises to become the kingdom in all War Department research.

Ordnance Blasting.—While Ordnance is still holding for a share of the guided missiles program under terms of the directive, which was issued a year ago, the directive itself has become meaningless in view of Gen. Arnold's position. He is responsible only to the Army General Staff and has Staff authority to resolve all jurisdictional disputes.

The Ordnance directive referred to Ordnance development of those missiles which depend upon mechanism for their effectiveness, and to AAF those missiles depending upon aerodynamics. Actual aerodynamics, however, has been based upon interpretation of the words "mechanism" and "aerodynamics." AAF has insisted that aerodynamics embraces maneuver and up to now, at least, Arnold has accepted that definition.

AAF's present presentation in guided missile research is seen also as having an effect upon the Navy, as well as the Army. AAF is engaged in work on "air-to-air" and "surface-to-air" missiles. Success in that can indicate the use of guided missiles play the part in any future war that it is generally believed they will, and should the AAF perfect an air-to-air and air-to-surface device it would have

a consequent effect upon Navy research and tactics.

Five Point Program.—The AAF guided missile program consists of five major areas of investigation: (1) Aerodynamics and Design, (2) Propulsion, (3) Guidance and Control, (4) Warheads, and (5) Launching Methods and Equipment.

Research into these phases of the program is being actively conducted by more than 200 universities, aircraft, electrical, chemical, mechanical, and other industrial enterprises.

The research work is unclassified and directed by the AAF Scientific Advisory Board, made up of the nation's outstanding scientists, and headed by Dr. Theodore von Karman. In charge of the entire program, and responsible only to Gen. Spaatz, is Maj. Gen. Curtis E. LeMay.

Initial technical stage of the AAF guided missile program is a very slow development and increases in the progress that the word "initial" has become misleading and confusing in a classification of the many phases of the project.

Developments Loosened.—Some of the developments under way are:

Glide Bombs.—Fourteen types have been tested. These designs for the most part consist of various type bombs integrated into a two-boom two control surface assembly.

Jet Propelled Bombs.—Four types have been tested, one additional being completed. These include variations of the German V-1 experimental flying wing types, power plants of rocket, ramjet, turboprop.

Controlled Bombs.—Eight types of XB-47s have been tested. These include externally-designed expendable aircraft as well as standard tactical types loaded with explosive and directed by remote control or homing devices.

Control Systems.—Eight broad types of control systems have been investigated and are being developed rapidly. These systems cannot be described, but radar, telemeter, homing, tracking, and guidance devices have already been proved successful.

Finally, contrary to the opinions of other departments, AAF has already superseded German capsule atomators in model fuel atomizers. The application of these compounds in the manufacture of monoblasts in an inhibitive trend.

Research Rockets.—Four types are being tested, with others under development. An arbitrary altitude of 700,000 ft. is the immediate goal.

Secret Devices.—More than a dozen fundamental research projects are now well advanced which relegate the seemingly fantastic



Science-Carrying Bombs. The tank of the GB-11, shown here without discharge tube, can be filled with gas, bacteria, or chemical agents to be loaded over enemy troops or cities. The GB-11 is launched from a plane and guided to target by radio. (AAF photo)

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HEADLINE NEWS — 7

Constellation Blaze Started in Cabin—Pilot

TWA Capt. Brown's testimony at Reading hearing indicates electric fire caused smoke which led to crash.

Witnesses indicating that the fire which caused the accident to the TWA Constellation at Reading, Pa., originated in the engine compartment, just forward of the passenger cabin, was presented at the opening of the CAB hearing last week in Reading.

Man testimony presented is the opening phase of the hearing was the statement of Capt. Richard F. Brown, who was pilot of the aircraft. "The smoke started like a cross between insulation and rubber," Brown's statement declared. "I sat back, I would say it was an electrical fire."

Brown's Statement. — Brown's testimony was presented in the form of an eight-page statement, since the hearing was adjourned. He related that he was the first to sense trouble on the step. "We were out of the field at 8,000 ft. I know I looked John Stauder, right engineer, & he would put the mixture in the Number Four engine in the idle cut-off while I made Major (Capt. George) Wilson, senior pilot, who was checking out on the right, do some static turns."

At that point Brown related, he smelled smoke and sent Stauder back to check the radio equipment. "I spent a lot of time down out of there," he said. Brown ordered Stauder to turn off the radio equipment and a few moments later Stauder reported that the static control was on the Stauder and one other crew member attempted to put off the fire, but the smoke was too dense.

Confusion developed short time since Stauder wanted to de-icer the propeller as the Number Four engine and Brown ordered Number Three feathered. Brown stated that it was the Number Three engine that was backfiring, after its power had been reduced, and then caused back fire. Smoke was very thick in the cockpit and Wilson awoke in the pilot's seat.

Flight 878 Testimony. — "I had open my window to see out," Brown stated, and continued, "We were about 3,000 or 4,000 ft. at that time. I couldn't see my instruments, couldn't even see the wheel. I unhooked my safety belt and just practically both shoulders out of the

One possible explanation was heard at the hearing of statements by lay witnesses that an engine started to be on fire. From the baggage compartment, the fire spread quickly through the interior and up. Smoke apparently got into the wing and a negative pressure drew the smoke out through the Number Three engine, giving rise to the belief that this engine was on fire.

Meanwhile TWA's investigation authorities, on which it had been using Contractors, still were some 28,000 plane-loads away from normal, and lacking about 860,000 seat-miles. Consequently, the carrier was off about 4,000 plane-days weekly and about 400,000 seat-miles.

McCull Appointed Marks NATA Shift

Appointment of Harry McCull, former director of governmental affairs for the Air Transport Association, as executive director of the National Aviation Trade Association, was another sign by NATA toward becoming a federation of strong state associations rather than weaker groups or in the past.

The change from a regional to a state basis has already been endorsed by NATA members in the third region following a recent meeting in Chicago. Other evidence of a willing acceptance by NATA members of the switch are found in the formation of several new state associations, the latest being the organization of the Georgia Aviation Trade Association, under the presidency of Richard S. Davis, chairman of the Atlanta Chamber of Commerce, and the Massachusetts Air Service, Inc., of Boston.

Domestic State Groups. — McCull is believed to be a leader of state associations on the basis of many years' experience in state affairs. Before going to ATA several years ago, he had been active in the field of state legislation, taxation, and regulation for aerospace interests.

This week McCull will send to NATA members draft of recommendations to be presented at a special meeting to be held in Cleveland, Aug. 29 at the Statler Hotel. The draft will be the working agenda for a new organizational set-up for NATA which will also define its spheres of activity.

Brussels Statement. — The Cleveland meeting and the growing emphasis on state groups probably mean the end of the regional meetings which get underway last spring with the members' flight.

one in New York, and was followed by the Chicago gathering.

McCull will maintain NATA's national headquarters at 1265 Connecticut Avenue, Northwest, Washington, D. C. He will be assisted by Miss Edna "Tod" Walker, who was his assistant in the governmental affairs department at ATA. A. Lee Custer, Washington attorney, will continue to serve NATA as general counsel.



NIGHT-FIGHTING F7F-SN

After being passed over by the Navy for use on carriers, the twin-engined Grumman F7F fighter has been turned over to the Marine Corps for use as a night fighter. As an era ends it has a new role it has a new name passed with read equipment. (Navy photo)

plane B-52 "Bolo Guy" which dropped the first atomic bomb, General Carl Spaatz's German-built Photo-Search observation plane

Vinson, Walsh Slated For Military Posts

The two men slated to become the bipartite in the new Congress on military and naval aviation matters, under the Le Poer-Timote-McCormick merger bill as which Congressional action was completed last week, are Rep. Carl Vinson (D-Ga.) and Sen. Wayne Morse (D-Ore.).

Under the reorganization, the Military and Naval Affairs committees of the two houses will be merged into a House Committee on the Armed Services and a Senate Committee. Vinson and Morse are now chairman, respectively, of the House and Senate Naval Affairs Committees.

Vinson, since his return from the service, has been Assistant Administrator for Foreign & Domestic Operations. Lander is transferred to Atlanta, as Second Region Administrator for areas including Florida, Georgia, Alabama, North and South Carolina, and Tennessee. The duties of Koch in Foreign and Domestic Operations have been split into two posts.

William B. Robinson was named Assistant Administrator of Foreign & International Operations, while Howard Raugh is the new Assistant Administrator of Domestic Field Operations.

Deadline Extended

Deadline for filing non-scheduled air carrier operating certificate applications was extended last week from Aug. 1, to Sept. 15. The extended Part 615 of the Civil Air Regulations now reads: "An air carrier engaged in non-scheduled air carrier operations on or before Aug. 1, 1946, may continue to engage in non-scheduled operations without an air carrier operating certificate until such time as the Administrator issues upon the application for such a certificate of power to do so." On Aug. 14, 1946, he has filed with the Administrator an application for such certificate."

A continued Democratic majority in Congress would mean Armed Services Committees can by Navy champions, but a Republican majority would set up AFMFA Affairs Committee in its chairmanship of both House and Senate committees. Rep. Walter Andrews (D-N.J.) would be the chairman for the chairmanship of the House committee, and Sen. Styles Bridges (D-N.H.) for chairman of the Senate committee. Both men are AFMFA boosters.

WAA Civilian Plane Sales Reach 16,097

Residents of California, Texas and Florida buy one-third of surplus aircraft for civilian use, survey shows

Residents of California, Texas and Florida have purchased one-third of the 31,097 surplus twin-engine aircraft sold by the War Assets Administration, that agency reported last week in a market summary based on its sales to April 30 of this year.

Primary trainers, liaison and transport types have accounted for 77 percent of all sales. Primary trainers and liaison types alone have totaled 47 percent of all sales.

While the increasing output of new personal planes has advanced the market to some extent, the WAA summary reports, surplus sales have held up well, the average weekly usage during the last four months of the year being 32.

As expected, private flyers have been WAA's most numerous customers. They constitute 66 percent of all buyers. Of the 3,067 planes, 2,142 were purchased by 4,534 private flyers. Individual buying狂热 to no three aircraft were sold for 77 percent of all purchases.

Largest buyers, in terms of number of planes, have been aviation enterprises, which have been the volume purchasers. While constituting less than 10 percent, numerically, of the buyers, they have accounted for 45 percent of all the aircraft sold. Of the 2,084 aviation enterprises which have dealt with WAA, 222 have bought 30 or more planes.

Break-down of surplus sales by WAA through May 31, 1948, in primary trainers, 3,782; liaison, 5-

358, basic and advanced trainers, 4,716; transports, 2,039 and miscellaneous, 385. These are complete surplus sales with the exception of the 3,279 planes sold by CAA, up to lagidation of the War Training Service program.

Giving California the lead in number of planes purchased was Los Angeles County, with 1,735 aircraft bought, more than four times as many as the second highest county, Dade in Florida, where 389 planes were placed.

A possible clue is a desirable price ratio for personal aircraft,

always considering that WAA's prices were set, 40 to 50 percent

above the market, the 1946 price

of a primary trainer, \$1,901-\$1,009

at which 1,000 planes were sold in

the next highest region, \$1,901-\$1,009

2,341 aircraft were sold. Aircraft sold for less than \$500 numbered 3,334. In the range most nearly commensurate with new plane prices, \$1,901-\$10,000, 1,166 aircraft were sold.

Deficiency Bill Cuts Philippine Air Aid

An \$8,000,000 allocation for aviation facilities in the Philippines, a \$3,713,899 carry-over for construction work on three National Advisory Committees for Aeronautics laboratories and a \$1,533,550,434 allocation to military and naval aviation agencies, were approved by Congress in the third deficiency appropriation bill which has been sent to the President.

Aeronautical Development.—The \$1,000,000 grant for airports and air navigation facilities in the Philippines will enable the Civil Aeronautics Administration to develop

international gateways on the islands for overseas U.S. carriers.

Advertisement plans called for a \$34,264,596 aviation development program, looking to a comprehensive civil and intra-island airway system. The rehabilitation work of the civilian and military airways in the Philippines is covered by the Philippine Rehabilitation Act. The combine Administration program was called "all out of reason" by House Appropriations Committee which stipulated \$8,000,000 as the "full amount" to be expended for aviation facilities on the Philippines. The Senate sustained the House position.

NACA Carry-over.—NACA is authorized to carry over \$2,720,000 appropriated for construction of laboratories at Langley Field, Moffett Field and at the Cleveland laboratory during the 1948 fiscal year. The carry-over will be used to complete the present fiscal year. NACA secretary John Vassily, explained that, due to circumstances beyond its control, NACA has been forced to slow down construction work on research facilities, and it behind schedule in obligating funds. NACA's construction work has been sharply curtailed due to postwar budget cutbacks, the Committee has lost priorities for building materials, and, because of industrial unrest, has run into difficulties in getting competitive bids on construction contracts, Vassily reported.

Air Aviation Cutbacks.—Army Air Forces is directed to retain \$1,865,360,390 of its 1948 fiscal year appropriation to the Treasury and the National Bureau of Aeronautics, \$24,436,434. The refunds of the air services result from cutbacks through cancellation of contracts.

CAA Opens Paris Office; Eight Others Are Planned

CAA will open an office in Paris, France, next month, the first of nine foreign registered offices to be established. Administrator T. P. Wright, announced last week.

Office will also be set up at Ceylon, Shanghai, London, Sydney, Australia, Mexico City, and three yet-to-be decided locations. CAA already maintains offices at Lima, Peru, Rio de Janeiro, and Tolosa.

The foreign offices, antennas of which will be concerned with safety regulation and air carrier inspection, as well as other editorial and administrative functions, will be staffed by four persons each; those experts on operations, maintenance and radio, and a clerk.

AAF Initiates Intense A-Bomb Training Plan

(Continued from Kwaihsing)

By SCHOLER RANGB

Intensive atomic bombing training is now being put underway by the AAF, with the first atomic bombs dropped by the service. The first atomic bombs developed for the AAF were dropped by the 509th Composite Group at B-52s based at Bokchay Field in Tali. Defense development of A-bombs is being conducted using very long range bombers now being tested by Commandant Walker, Northwest, and Boeing.

The training program will be initiated by the 310th Wing AAF

at Kwaihsing on the 15th, followed by the 311th and 312th wings on the 16th and 17th, respectively.

The 310th Wing, which is the first to receive the A-bomb, will be based at Bokchay Field, Kwaihsing, and the 311th and 312th wings will be based at Kwaihsing and Tali, respectively. The 310th Wing will be the first to receive the A-bomb, followed by the 311th and 312th wings.

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PRIVATE FLYING

Beech Four-Place Bonanza Aimed At Executive Transport Market

By WALTER WHITING price at \$7,345 with complete set of blind-flying instruments; powered by 165 hp. Continental II is designed to cruise at 175 mph.

Analysis of the operating costs of the new four-place Beech Bonanza Model 35, prepared by the company with its first detailed management of the plane last week, offers a new approach to aerial success for business not developed through the company's long experience with aircraft and sale of twin-engine executive transports.

Conceding that the \$7,345 flyaway price will not attract the private plane owner of moderate means, Beech Aircraft Corp is directing its major sales effort at business firms which are among the advantages of having their own planes for executives and salesmen. It is also planning the Model 35 selling campaign at air tax and charter service operators.

Intending to the competitor of any large company whose employees do much traveling, is a French study on travel costs which is based on estimates of traveling personnel, the last five years by air, surface transportation, and passenger-mile operating costs of the Model 35 Beech aircraft.

If a company puts an employee as

such as \$95 a week, the company can better afford to send him alone with a maid pilot in a company-owned Beech Model 35, than to have him take a train.

It is cheaper to have two employees traveling together, by Beech Model 35, than by surface transportation, if their salaries are \$79 a week or more.

If it is as easy as these employees are traveling together, the operating cost of the Model 35, plus pilot, is less than the cost of rail or bus tickets alone, not considering salaries of employees at all.

An air tax operator with a reasonably large group of customers can afford to charter the Model 35 at 15 cents a mile with no extra charge for waiting time while the plane is on the ground.

The company analysis is based on a salary of \$600 a month to the pilot, plus fuel and oil, depreciation cost, maintenance, including storage, and insurance. Not including the pilot, direct operating cost of the plane is estimated as less than 1½ cents per passenger mile with three passengers.

Comparison of the Model 35's \$7,345 price with flyaway prices of other four-place planes on the market, the Beech Model 35 is considered the best buy. Beech is equipped with full equipment, including six-hole controllable propeller, complete day and night and instrument flying equipment, and many other equipment not heretofore considered standard in production airplanes.

While the plane has not yet received its NC number from CAA, it has completed most of its requirements, and the company expected to receive it soon, after which the plane should be marketed. It is already in limited production at the Wichita plant.

Performance figures, developed through more than a thousand hours of test-flying several experimental prototypes, indicate the Beech Bonanza is the fastest of the four-place premium planes of comparable horsepower, yet unenclosed, with

Top speed of 165 mph at sea level.

Cruising speed of 135 mph at 36,000 ft.

Altitude range of 750 miles at 165 mph at 36,000 ft.

Stalling speed of 46 mph with 30° flap.

Service ceiling of 18,000 ft.

Takeoff run (sea level) with 10 mph wind: 425 ft.

Landing run (sea level) with 10 mph wind: 315 ft.

Average fuel consumption 16 gals per hr.

Gross weight of 2,550 lbs.

Useful load of 1,340 lbs.

Payload (165 mph) 700 lbs.

The Bonanza is a low-wing re-



Interior and Landing Gear Interior view of the Beech Model 35 is described as about the equivalent of that in an average coach automobile. The front



retractable, tricycle gear uses large side tips for rough fields. Monotube is free-swinging with no bearing, hydraulic servo-actuated, and road steering.



Retractable Step. Recent application of the aircraft designer's First Commandment, "Solve your Man Problems with an Old Idea," is the retractable step presented by French Aircraft Corp. as the new Jeppesen Model 23 Bonanza. It provides a foot-hold opening between the engine and the front landing gear of the tricycle-gear plane. It not only solves nothing else quite so neatly as the old-fashioned buggy step

tricycle tricycle-gear monoplane, powered with a 150-hp Continental Model 6-160 engine, rated at 150 hp at 3,000 ft rpm, at sea level and turning a French Model 6-160 electric, counter-rotating, continuously variable pitch propeller of 7 ft. 9 in. diameter. Wingspan is 31 ft. 18 in., length 25 ft. 2 in. and height 5 ft. 6 in.

Cabin is 6 ft. 6 in. long, 2 ft. 8 in. wide and 4 ft. 3 in. high, with a single passenger seat, 38 by 37 in. and a baggage compartment of 185 cu. ft. with a 130 lb. capacity, and with a 24 by 22 in. outside door.

Most novel design feature is the Vee or "Butterfly" tail which the company has tested extensively and pronounced "definitely superior to standard empennage from standpoint of drag, stability, lightness, cost and replacement." Conventional controls are supplied, but the company claims that the pilot does not need to use rudder, except for cross-wind landings and takeoffs since the plane makes "perfect turns without use of the rudder," because of the tail design.

Wing is set at an angle of attack which gives considerable lift value as soon as the plane attains flying speed, making for greater lift, and, similarly the wing offers considerable lift while the plane is

descending, thereby making the plane easier landing on the ground.

Other features include:

- Sturdy metal turnover structure on cabin top
- Ultra-waterproof Lucas windshield with defrosting heating arrangement
- Retractable step just below wing-roots for easier access to cabin
- Cabin dome light with ultra-violet projector to light instrument panel at night
- Dome local speaker
- Complete flight instruments, including radio control, transponder, marker beacon receiver, housing bags, automatic antenna reel
- Blowers on engine, which supply heat through five-dart heating system to cabin and quiet engine
- Propeller designed for slow-turning and quiet
- Soundproofed cabin with full upholstery including full-well seat
- Navigation, landing lights
- Three-spoke control wheel with two height positions on each side for lessening pilot fatigue
- Four carburetors, four airways, and one carburetor fuel
- Instrument panel with protruding knobs, switches, levers and sharp corners shielded for safety
- Clear windows which open for ground ventilation and easy exit for emergency exit
- Front and rear safety belts similar to auto
- Electric landing gear and flap controls with emergency manual takeout gear control
- Bag and glove compartments

Flyers 'Fecpoets'

"Fecpoets" may become the term used by private flyers to designate the many individuals who stage flying contests for personal planes which use the facilities of the association of Lowell Swanson, executive vice-president of National Aeromodelers Association, as accepted.

At the recent 19th Annual Flyers' Conference, at Milwaukee, and White City Ranch, Wisconsin, Wis., Swanson urged private flyers to consider seriously a program of competing flights which would include, to determine the best flying, the time they can expect there. He urged a national listing of such "Fecpoets" and asked for the co-operation of the American Aeromodelers Association, in spreading the designation.

Private Pilots Offered Variety of Meetings

Private flyers who want to rank air shows in their own planes have a wide choice of places to go in the multitude of air shows and fly-ins that have been scheduled this summer and are still being announced. Among them:

- Mexico City—Official invitation by the Government of Mexico is extended to all pilots of the United States to attend the Dass Patrias Independence day celebration Sept. 14, 15 and 16 in Mexico City. The Mexican air corps is hoping as many as 3,000 American highfliers will fly through the Lower Rio Grande Valley gateway to Mexico. Mexican crews at Brownsville, Rosalia, Babo Roca, will be in charge of arrangements with an assisting American committee.
- Wichita—Wichita, prairie flyers who attend the fly-in for the National Semi-Pro Baseball tournament at Wichita, beginning Aug. 18 will receive complimentary reserved seats to the tournament and be guests at a barbecue and other entertainment. Wichita's 35 airports are co-ordinating efforts to handle the expected large group of visiting flyers, with arrangements handled by Wichita's NAA chapter.
- Chattanooga—Fourth annual National Airlines Training Day and fly-in will be held at Loveland Field, Chattanooga, Tenn., Aug. 18-21, under sponsorship of the Chattanooga Flyer Club. An Airshow and Aviation Fair will follow the plane show. Each Sunday, similar to the "Berkeley Jamb" aviation show, will be a headliner at the show.

•Elko Beach—The Elko (N.M.) Ranch free fly-in barbecue party is scheduled Aug. 3-4. Host is Ray Taylor, Aeromodels distributor, Ft. Worth, Tex. Taylor who advertised the party in magazine invited all private flyers, and sent out advance letters in Texas style asking whether the competitors were going to send 18, 20 or 24 plasticists to his party. Taylor estimated in advance an attendance of 4,000.

•Denver—Private flying enthusiasts who don't mind those 14,000 ft (and over) Colorado peaks, may go out to the Denver International Air Show, Aug. 18-22, under direction of Stanham Aer. It is pointed out that Denver's weather provides 300 days of CAVU weather a year.

•Baltimore—Private flyers from

the Baltimore area flocks will fly to Baltimore Beach Aug. 11, for the second in a series of breakfasts that the beach party follows a short Sunday breakfast flight from Baltimore to Leavenworth, Pa., in which 27 planes participated.

•Cleveland—Approximately 30 planes participated in a three-day Cleveland air show held recently under sponsorship of the Cleveland Senior Citizens Commission, the National Air Races, and the Cleveland Junior Chamber of Commerce. The four scheduled stops at Sandusky, Toledo, Lima, Dayton, Cincinnati, Port Huron, Marquette, Allendale, Wooster and Mansfield.

Noise Tests at Paoli Compare Car, Plane

Comparisons of aircraft noise levels with the noise of surface traffic of trucks and passenger cars, reported by Aircraft Owners and Pilots' Association from tests recorded by CAA at Malvern-Paoli airport, Pennsylvania, provides significant data for other small airports showing the noise differences from nearby power plants.

Tests were made with a Western Electric Type 1A-371 Sound meter, using a non-directional microphone mounted two to four feet above the ground, at 10 locations on and near the airfield. Readings were made of peak sound levels of a Fairchild PT-18A, 220 hp. plane, and a 65 hp Piper Cub trainer. It is estimated that the 220 hp engine will be as powerful as that of any plane expected to use the new Malvern-Paoli field.

Comparisons of the tests were: Malvern aircraft noise level to be compared with the landing aircraft expected to operate, and with the microphone directly below the airplane takeoff path, is 18 to 22 decibels.

•Noise level in the vicinity of the Malvern-Paoli airport, from aircraft approaching or circling, directly overhead, will be 70 to 80 decibels.

•Normal peak sound level for aircraft passing within one-half mile of airport will be 65 to 70 decibels, depending on size of aircraft.

•Truck noise at distances of up to 200 ft from highway couch peaks of 50 to 55 decibels. Passenger cars generally use 10 to 15 decibels lower.

•High level (overpower) street traffic (2 to 3 planes in hour during



PIPER'S PONCA PLANT:

Aerial photo of Piper Aircraft Corp.'s new western assembly plant recently acquired at Ponca City (Okla.) municipal airport. Plant includes 38 acre tract with 163,000 sq. ft. of manufacturing space. Plans call eventually for putting the three large hangars in foreground, to provide a continuous assembly line.

day) produces noise levels in the general airport area, of 74 to 81 decibels.

•Plane sound levels produced by local aircraft traffic normally are from 3 to 5 seconds duration. Other disturbing noise is generally of longer duration.

It is understood that CAA is contemplating making a complete series of sound tests on aircraft noise using various types of aircraft, and that it may make its equipment and



EMBRYO AIRPARK:

This pasture with three planes, a hangar, an Avance dealership and big office, are converting a 60-acre wooded area on U.S. Route 50, just outside Falls Church, Va., suburban residence of many Washingtonians, into an airpark. The development, started last winter, now includes 2,600 ft. by 100' landing strip, garage, administration building, and space for plane tie-downs. Flight instruction has already started. When initial hangars already on site, a drive-in service station, and other conveniences for air and auto patrons, and administration building, shop, tennis courts, and a swimming pool. Partners are Raymond Charles, former racing engineer, A. H. Morris, former ATP and service pilot; Carl Schubert, former CAA controller. Flight Instructor Norman Blair was a former CAA theater using plane.

The province of British Columbia, Canada, has been added to Aeromac's distribution territory, which already included Oregon, Washington and northern Idaho. Robin is also West Coast distributor for the Repulse Series amphibian and for Schleicher gliders.

Coffman New Head of Ohio Flying Farmers' Group

Charles Coffman of Carroll, Ohio, was elected president of the Ohio Flying Farmers' Association, at an organization meeting at Don Scott Airport, Columbus, Ohio, sponsored by Ohio State University. The meeting was attended by nearly 400 farmers, and 37 former Farmers became charter members of the association. Speakers were:

William T. Poyer, president of Piper Aircraft Corp., C. R. A. Brown, Ohio system director; Dean Jake P. Cunningham, of Ohio State college of agriculture; Col. E. H. Straton, Civil Service of the National Flying Farmers' Association; and Charles R. Cox, Jr., CAA private flying specialist. Other state officers are: William Glavin, chairman, vice-president; and Marvin Baker, Marrow, secretary-treasurer.



CULVER CONTROLS:

Complete arrangement of instruments and controls for Cessna Model V two-place propeller aircraft is shown in photo. Square dial on upper center is the Simplicity Control dial, which indicates how plane is oriented for various flight conditions. A solenoid between the control wheel, propeller pitch control, radio, handbrake, aeronutic lock, etc. and seat are mounted on center pedestal below panel.

—Alexander McElroy

Briefing For Private Flying

A GOOD DAY TO FLY—Stuart (Andy) Anderson, Milwaukee aircraft operator and dealer, made a hot but work day for his crew to haul his Cessna to Fenton Trecker, chairman of the Milwaukee Air Show committee, that these would be not more than 75 planes of the fly-in barbecue which Trecker held for the Private Flyer's Conference at his "State" ranch, 150 miles north of Milwaukee. Trecker offered Anderson \$1 for each plane under 50. The tally came to \$5. So Anderson paid \$5 for the extras and still was pleased that so many flyers appeared.

REPRESENTATIVE LOP—The 51 planes represented most manufacturers who have 300s in their power model. There was a considerable showing of surplus trainers, and power planes as well. Stinson Voyager 138s and Antonovs predominated among the new planes, but there were plenty of Ercoupe, Pipers and Taylorcrafts, Lancasters and Convars, a couple of twin-engine Beeches and twin-engine Convair, and one each of the Grumman Widgeon, Bellanca Cruiser Jr., and Cessna Swift, among others.

DOWNTOWN LANDING STRIP—Milwaukee's Midland air strip was within 100 walking distance of any hotel. We lit it up to see. The strip was good enough for Navy "Bellcats" and "Corsairs" to land for exhibition at the Milwaukee Conference window. Incidentally, the way these Navy planes folded their wings and taxied through a gate about 20 ft. wide, opened the eyes of some of the private flyers in the adventures of folding wings for personal planes.

MILWAUKEE HAS SOMETHING—Except for the aviation interests, Milwaukeeans generally don't seem to realize how fortunate their city is to have a really modern airport strip. There is more talk about its being expanded as an landing project. But meanwhile, Wisconsin farmers are beginning to fly in from upstate to practice Milwaukee strip. Milwaukee business men like Trecker can concentrate between their summer houses and the city by air. There isn't another city so close to the country with a comparable landing facility.

PEOPLE AT THE CONFERENCE—Honksters at the conference were two private-flying movie stars, Tyrone Power and Cooper Breen. They flew in from Wichita, where Power had taken delivery of a new tri-engine Beechcraft. He and Breen expect to make a pleasure flight in it to South America soon. Breen has a new four-place Beech "Missouri" Model 15 at the factory and thinks that is what he wants to have to get enough time for his ticket. Mrs. Jerome Langley, national president of the Society-National, and St. John, New York, a flightless bird of bags Milwaukee, came along for the Milwaukee flight, as did the Private Flyer's Conference. Harold L. Taylor, Albany, N. Y., won the trophy for making the longest flight in his own plane to attend the conference.

E. K. Jordan, executive secretary of the Wisconsin State Aeromodelers Association, told the conference about a meeting rounding flight he had made recently between Madison and Milwaukee. He left Madison after doing most of his morning's work, driving of the Milwaukee air strip in time for a luncheon engagement and conference, and was back at his dock at Madison by about 3:30 p.m. Such flights and times saving will become a commonplace for people with business in Milwaukee, he predicted. —Blossom Night, CAA aeronautics specialist, flew in from Washington in a Fairchild F-24, with a wheely engine. So it was a novelty for her to sit back in Trecker's Beechcraft and let somebody else fly her in his barbecue and back.

—Alexander McElroy

Ercoupe Price Boost

A \$500 boost in the price of the two-place Ercoupe, fixing the price at \$3,600 was announced last week by Engineering & Research Corp. in its distributors and dealers. The price increase is to be effective on

planes beyond serial No. 2800. The increase is expected to include several valuable accessories and improvements in the plane, utilizing some new type fast tools. Increased labor costs made the price increase necessary, the company said.

* larger profits

* lower sales costs

* better customers



Automobile engine-like "turbo" will be equipped with Aeromac's Propeller. Aeromac are also used on most North American "Simpsons," "Bellcats" and "Corsairs." The Aeromac propeller is a variable pitch propeller in standard equipment on Boeing "Jumbos."

... they're all yours when you sell
AEROMATIC PROPELLERS!

If you want your own sales . . . you couldn't ask for more profitable features than those of Aeromac Aeromac Variable Pitch Propellers. Aeromac bring a sizable profit on the initial sale. Aeromac are easier to demonstrate, easier to sell, with lower sales costs. Aeromac owners get more fun out of flying . . . become better prospects for your other goods and services. Aeromac benefit from "word-of-mouth" publicity by enthusiastic owners. And they're an exclusive item, too!

The Aeromac is the only fully automatic variable pitch propeller. It varies its own pitch as needed to natural forces . . . utilizes full engine power at need speed . . . insures maximum performance under all flight conditions

. . . without any extra controls or gadgets. Aeromac Aeromac-equipped planes take-off with up to 35% surbur man . . . climb up to 25% faster . . . get top flying performance on minimum fuel consumption . . . make long, fast glides for safe landings with a quick pick-up if the pilot overextends his field.

Why not use this page to your manufacturer or distributor today . . . along with a new slogan: "Whether Aeromac Propellers can be made available for the planes you sell. He's renowned in proven methods for boosting the popularity and sales of his planes. And the profitable Aeromac business you can build makes it worthwhile! Aeromac, 678 Scott Street, Baltimore 3, Maryland



SELL THE ONLY FULLY AUTOMATIC VARIABLE PITCH PROPELLER FOR . . . shorter take-offs, faster climbing, better cruising, safer landings.

THE PROPELLER WITH A REASON FOR EVERYTHING PLANE!
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THE Merchandise
THE Plans
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a business builder, a profit producer!

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quality, popular, complete, quick selling.
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bring new customers for all departments
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How" — more than 40 years serving the
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In the years of Wright engineering you can see the development of air transportation as we now know it. From a remarkable list of Wright-pioneered engineering developments have come the first engine with reliability for worn engines, first with power for cargo transport, first with economy for passenger long-haul flight, both commercial and military.

Today, newly named in the eastern Wood-Ridge plant, Wright research turns to the next major developments of air transport - short-haul and ultra-long-haul operations. The story of Wood-Ridge begins with Cyclone 15 production for the biggest planes now in use. The new engines to come will tell of power pioneering for every need of transportation and national leadership in the air.

Boeing Scouts Seeking Engineers in Colleges

A new program aimed at retaining the services of engineers is being launched by Boeing Aircraft Co., with the intention of adding 250 by Jan. 1, and an additional 300 by July 1, 1947.

The plan involves the "scouting" of leading colleges and universities by Boeing engineers. The engineers will visit the schools they attended in an effort to reacquaint both instructors and students with the work carried on by Boeing and the types of engineering skills needed.

Ray Mass, Boeing administrative engineer, says that "in contacting colleges, I have discovered that many deans and professors were unaware that an aircraft company such as Boeing uses engineers other than aeronautical."

Part of the "recruiting" work of the engineers will be to point out the need of engineers of all types and stress that the demand will continue for some time because of Boeing's work on the Stratobomber, Model 417, C-97, B-52, and experimental work for the Army and Navy.

Fairchild Trainer Sale

Set for Niagara Falls Field

Sale of about 350 surplus Fairchild PT-26 primary trainers, an improved version of the PT-19, will be held by War Assets Administration beginning Aug. 12 at Bell Aircraft Modification Center No. 7, Municipal Airport, Niagara Falls, N. Y., where planes will go into inspection beginning July 20.

Training, 12 through Aug. 26, will be ready only to priority holders.

The PT-26 is a low-wing monoplane with 260 hp. Ranger engine, full Pressurized cockpit enclosure, landing flaps and retractable nosewheel and tailwheel. It is equipped with heater. Maximum speed is about 126 mph., and it cruises at more than 100 mph.

Prices will range from \$1800 to \$3000, depending on condition.

The new entry in the field of pilotless aircraft and guided missile development has been established at Newville, Del., a Government-owned plant used during the war for Bellanca Aircraft Corp. The

company, Tasker Aircraft Research Corp., has leased the plant on a basis of a rental of two percent of net gains. It says it will employ 1,000.

Compact Hydraulic System Manufactured by Electrol

A compact, lightweight aircraft hydraulic system is now being produced by Electrol, Inc., of Kingston, New York. Designated "Power-pak," it combines hand pump, two separate three-way selector valves, relief valve and reservoir, yet weighs but five pounds and stands only four and one-half inches high.

Power is supplied by a hand pump, but parts are provided for connecting pressure and suction lines of a power-driven pump.

Because of its small size, the unit can be installed in any of several places in an airplane, on the main struts, the struts themselves, or on side walls of the cabin, or under the floor boards. Only the pump handle and selector valve leaves project from each a burned insulation.

Piper to Build Super Cruiser In Expanded Canadian Plant

Plans for building new facilities to manufacture the Piper Corp.'s Super Cruiser in Canada are nearing completion with announcement of a financing plan for the \$460,000 expansion of the Cub Aircraft Corp., Hamilton, Ont.

The Super Cruiser is to sell in Canada for about \$3,800 and is to be available for wheel, skid or float landing gear. While existing production in Canada, Cub Aircraft has converted 180 of the aircraft for the Canadian Air Transport Command.

One of the prime factors responsible for the first half loss is delay in deliveries of aircraft components.



Haljet Hydraulics, Inc., has come out with this small, lightweight hydraulic system designated "Power-pak." While weighing only five lbs., it has an operating pressure up to 1,000 lbs. per square inch. It is standard equipment on the Haljet Series for raising and lowering steps and undercarriage.

Material Shortages, Strikes Swell Boeing First-Half Loss

A net loss of \$1,971,485 for the first six months of 1946 is reported by Boeing Aircraft Co. An additional \$2,275,000 has been charged against the recompensation reserve during the period.

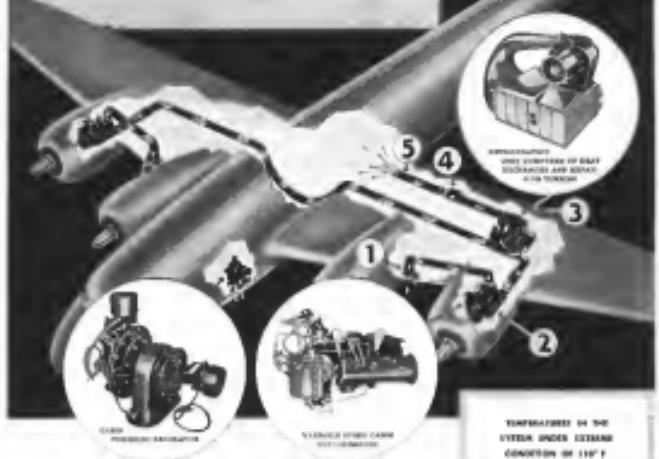
One of the prime factors responsible for the first half loss is delay in deliveries of aircraft components.



COMMERCIAL CAT

Canadian Car and Foundry Ltd., Montreal, is converting PHY-5A Convair airplanes (Canadian version of the Cardinal) for commercial use. Gas blisters are replaced by cargo bunks. Seats are installed for four passenger chairs and bench seats for nine. The converted airplane has a five-ton payload. One aircraft is for the Texas Oil Co. to use in South American exploration.

A COMPLETE
"Cabin Comfort" System
FOR LARGE TRANSPORTS



...Provides Full, Automatic Control of

Cabin Pressure, Temperature and Humidity

Several major units—each an outstanding engineering achievement—are combined into a single system which meets all air conditioning needs of modern high speed, high-cruise passenger transports.

By integrating units of suitable capacities into a single system, Allison's solution to a major problem for designers of new aircraft. Not only are all parts, controls and economics obtainable from a single source, but Allison's air conditioning experts are available to analyze special problems and suggest the very best to meet particular needs.

All Allison's "Cabin Comfort" systems, whether for jet fighters or turboprop transports, are designed by high performance in relation to size and weight, power efficiency and maximum safety factors. Careful consideration has been given to ease of installation and economy of maintenance under operating conditions.

Allison's leadership in the field of aircraft air conditioning and cabin pressurization is based on seven years of pioneering research and production. Call upon this unique background of skill and experience to help solve your AIRCRAFT air conditioning problems. Allison Manufacturing Company, Los Angeles 45, California.

TEMPERATURE IN THE SYSTEM UNDER EXTREME CONDITION OF 110° F

1. Ambient air system at 110° F
2. Liquor vaporizer at 100° F
3. Cooled air refrigeration coil in system
4. Liquor removed in waste system
5. Air return coils, maintaining outlet temperature at 72° F
6. Option optional above has been simplified for efficiency

Allison's "Cabin Comfort" equipment will combine the newest Allison Gas turbine which will fly the ball and in time become the most popular planes of tomorrow. Varying requirements in North American, Republic and Starship

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caused by shortages of materials and strikes in plants of suppliers. Delays in under-contract contracts are not expected to begin until the end of the year, President William M. Allen said.

Despite the heavy loss during the first six months of this year, the overall situation is not unfavorable. Should the company sustain losses for the balance of the year, a great part of the total loss as well as the charges against reserves can be recovered through the workings of the loss carry-back provisions of the income tax law.

Boring's backlog as of June 30 was \$130,088,860.

L.A. Concern Develops
New Type Air Seats

Possibility that a Los Angeles manufacturer will become one of the largest makers of airplane seating equipment is indicated by its aggressive tactics in the peacetime air transport market.

On the verge of extinction when war contracts ended, Ransburg Manufacturing Company in South Gate, on the outskirts of Los Angeles, grabbed headlines by turning to the manufacture of airplane seats. Already supplying established airlines, the company is scrambling for major orders to build thousands of seats for heavy and light transports soon to go into production.

For its "Aerosat" twin and triple seats in narrow, medium and wide versions, the Ransburg Company has employed consulting aeronautics. Another of its developments to assure maximum comfort for passengers on long trips is a seat which can be rotated and reversed without removal of its foundation from fastening and a hand-welded mechanism that will allow the seat to move freely on individual reclining, light, heated cell buttons, a storage tray beneath the cushion, and a base television radio receiver installed in the headrest near a speaker horn giving the traveler a choice of several major radio broadcasting bands. One seat, intended for trans-oceanic aircraft, is being designed to carry with it a Mae West life preserver.

Fleet Makes Bodies

A decrease in aircraft manufacturing activity by Fleet Aircraft Ltd., 21 Elm, Ontario, is as probable should the pending sale of that company to the Vickers Min-

ing Corp. be brought to completion. The mining concern has a contract to manufacture 480 passenger seats under license from Detroit auto makers, and this and other activity would utilize a large share of production facilities now being used to produce Canadian lightplanes.

Martin '46 Backlog

TOTALS \$175,000,000

With one of the largest backlog for commercial and military aircraft, The Glenn L. Martin Co. is expected to have its Model 205 and 305 transports ready for flight testing in the not too distant future, it is assumed from the statement in its report that a total of 197,000,000 of its \$275,000,000 backlog will be liquidated by the end of next year.

Most of the backlog consists of orders for commercial planes: 133 for 205's, 159 for 207's, and 38 for cargo versions of the 302. An additional 100 aircraft are to be delivered.

For the AAF, Martin is building the KB-50, a converted B-50, and is working on rapid assault development. Work for the Navy includes a production order for the XRTM-1 Mosler, now known as the AM-1, the XPHM-5A, the JHM-2, the tenth and last Mosler to be built, this one powered with Pratt & Whitney R-4360 engines.

For the first six months of this

year, the report detailed, Martin's net sales were \$10,487,137, on which the company realized a net profit of \$304,971 after all charges. "This compares with total net sales for 1945 of \$236,162,000 and net profit for that year of \$4,379,372.

In addition to its aircraft business, Martin has a number of other products it is exploiting, including ground-based equipment for airports, synthetic vision with the possibility of using a lightweight construction material, a photogeophysical method, and "Stratavision," a method of using an aircraft to relay television signals, being developed jointly with Westinghouse.

U.S. Firms Will Get
Final Surplus Deal

A plan under which U.S. business firms will become the final means of disposal of surplus—exclusive of aircraft—remaining overage is being whipped into shape by the Foreign Liquidation Commission.

The companies will buy all PLIC surplus stocks in given areas for lump sum—such as payment and terms—and then resell the equipment to commercial buyers abroad. This is a variation of the PLIC plan under which it has established lump sum blanket sales to governments of all surplus in the United Kingdom, France, India,



ALLISON DC-6 INSTALLATION:

Allison Division of General Motors Corp. has purchased a DC-6 from Douglas Aircraft Co. and will install T-330 liquid-cooled engines for experimental purposes. Photo shows Allison engineers at work on the fuselage of the Allison-powered version of the DC-6.

Here, as on no other time or place, the nation's foremost speed pilots will converge to fly for everyone's most coveted trophies and a minimum of \$105,000 CASH PRIZES

Everything from pulsing-thrilling jet-propelled speed dashes to quiet yet stirring historic demonstrations will be presented—in four days of intense excitement—and pomp and splendor—gorge and magnificence—drama and gaiety. Featuring the 2000-mile Trans-Tropic Race, big open load phone dashes of the world ... the Mexico Trophy Race, the nation's most spectacular race—confined to closed roads ... The Westchester straight-away speed dash for jet planes ... The Cleveland Southern Aircraft of Dallas Employs Women in Plant

Southern Aircraft Company of Dallas, Tex., has adopted a policy of employing women in the post-war reorganization of their plant. Women have been released in tremendous numbers during the period since the company asserting that women are more efficient than men in some phases of aviation factory work.

Women are being used in repetitive work such as marking of detail parts, subassembly, precision assembly inspections and in some cases on the individual machines. During the war Southern Aircraft employed 60 percent women in their plant and found their efficiency in many cases superior to men, according to Tom Gentry, director of industrial relations.

For details and ticket information, contact:
Southern Aircraft Company, Second Air Corps,
Union Cemetery Ridge, Cleveland 16, Ohio

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Information Management Department



AMERICA'S GREATEST SPORTS EVENT

Egypt, Brazil, Australia, New Zealand and Canada.

The cargo that will be involved in the new arrangement is located primarily in the Pacific Area, Germany, Italy, Panama and Trinidad. The chief itemized item available are spare parts, particularly for DC-3s, components, and equipment.

CALC already is in the postwar negotiations stage with several U.S. firms, some of which are agents of the War Assets Administration and desire to expand their field of activity. The proposed set-up is particularly appealing for such criteria as it is pointed out, because there have been 3,480 DC-3s sold overseas and this has created a huge and ready market for spares.

Cargo DC-3s Designed For Low Cost Operation

Brought to operate in all cargo service at a new low direct cost of 4.5 cents per ton mile, a modification of the new Douglas DC-4 is now on the company's production lines at the Santa Monica, Calif., plant.

The new DC-4-1007 has been especially engineered for cargo to carry 33,708 lbs. in a range of 1,300 miles and speed of about 248 mph. It has a cargo door measuring 5 ft. 7 in. by 8 ft. and a main cargo compartment with a volume of 5,200 cu. ft. There are four auxiliary compartments intended for package freight.

The direct cost figure of 4.5 cents per ton mile compares with 5.2 cents for the DC-3 with an allowable takeoff gross weight of 38,800 lbs.

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SPECIAL AIR SERVICES

CHARTER

NON-SCHEDULED

INTRASTATE

CAB Promises New Hearings For Non-Scheduled Operators

Deadlines for reports and comments extended to Sept. 3; some Board officials hope for more conservative criticism; carrier protests continue.

After six weeks of controversy, marked by what some Board officials considered a lack of constructive criticism, CAB is looking forward to more light and less heat discussions on proposals to restrict further the operations of non-scheduled carriers.

The Board held last month of finally extending until Sept. 3 the deadline for comment by interested parties on the proposed Amendment No. 3 to Section 3511 of the Revenue Act. Numerous and concerned carriers reported it would little affect their operations and presentation of views (Aviation News, July 20).

Report Due Extended.—Also extended to Sept. 3 was the date by which non-scheduled carriers must file a compensation statement and financial and traffic reports. Previous deadline for comment on the proposed amendment was July 31, while organizations were originally given July 15.

Advancement of the comment deadline is expected to give the interested operators time to "cool off" and work with industry groups in preparing factual data of value to CAB in formulating a definitive policy.

Similar benefits are anticipated from the deferred date for flight registrations. Some operators had been hesitant in giving information required by the report, observing that the data could be used by CAB as basis for route and denial orders under the present-effective regulations. The Board has assured industry representatives that it has no such intentions.

Reports Incoming.—Many of the approximately 350 registrations already received by CAB are incomplete, and letters have been sent out calling the carriers' attention to omission. One of the reasons

(scheduled services) on the ground that CAB's decision was based on incomplete data. The West Coast carriers also accuse overall government policies which permitted various agents, including the War Assets Administration, to assist the growth of an industry at the same time the Board was formulating controls making it impossible for most companies to continue in business.

MPA Wants Time.—The petition declared that the future of approximately 6,897 planes, 18,000 ground crew men and 33,450 miscellaneous personnel—nearly all veterans—is presently at stake. It asked that no order to cease and desist be issued until after Decree 1981 is rehired.

The Military Pilots Association asked that one year be allowed for gathering facts preliminary to a new hearing, and requested that as a condition of present non-scheduled operations be put into effect during the interim. MPA also called attention to governmental inconsistency in letting one department sell about 840 transport-type planes to an industry that might soon be throttled by another department.

Other industry developments:
• **Wright Air Express.** Long Beach City Municipal Airport plans to incorporate in Southern Airlines Inc. Possibly a partnership of military or West and



SLICK ANNOUNCES CABIN COOLING:

After extensive tests, Slick Aircraft engineers announce success in air-conditioning the interior of their C-46's. Picture, looking forward and to left in belly compartment, shows cooling plant at upper left with ducting leading to exit from the cargo cabin. (Slick Aircraft)

for example, have made use of the 1940 Bank to the U.S. and has already received payment of 1,000,000 additional pesos during the remainder of the season.

John C. Clegg and Michael J. P. Alford, Clegg and McLean, of Atlanta, were cost to lease. The company has charged it costs a passenger mile and an additional 10 cents for each mile above 1000 miles per month. The rates between May 1 and June 30, 1965, place rates for firms carrying 1000 passenger miles and 1000 miles per month at \$4000. Total revenue was \$4000.

composing panel, at 84067. Eight persons are employed. Officers include Michael S. Williams, president; Oneil D. Walker, vice president; and Charles J. Sauer, treasury manager. **Western Air Transport**, Bay Shore, New York

224 reverse sequence with coding for 240-245
of gene 226-228-230 protein codes and
proteins. 226,228,230 reverse genes
are found in *Yersinia* reference
strains. These reverse genes
223 with one exception are found at T223
at the end of *Chrys. M4*, and 225-230
reverse include *Escherichia* M 86
protein, *Enter. O157:H7* protein,
and *Escherichia* O157:H7 protein.

Public Flows, Inc., New York, is negotiating with H. H. Korn, attorney for the New York Stock Exchange, to have the stock of the company listed on the exchange.

First 'Copter Contract Service Uses S-51's

First air transport company to put a helicopter into routine service starts operations this month when Helicopter Air Transport, Inc., of Philadelphia, commences flights facilitated by an industrial compensation plan for inspection of dock materials and other work.

Though formed last September, Helicopter Air Transport, which is using S-51 Sikorsky's, withheld announcement of its operation until a few days ago, preferring to wait until it had the equipment, the personnel, and the contracts.

The first machine was delivered July 29, and two more are expected Aug. 28. By the end of the year the corporation hopes to have 100, although still may not be Behlen's identity at the time with which the company has contracts was not disclosed at first. Officials said, however, primary operations would consist in part of surveying equipment to inspect sites of structural data bases.

The company planned to file applications within a few days for CAB certificates to carry mail by heli-

President of the firm is John Wilder, brother of E. Justice Wilder, whose attempts to obtain backing for a fuselage "Zygolette" were described in *AMERICAN SHIP*, March 1945. Assisted with it are Eugene Juras, president of California Airlines; Sigmund Janus, Jr., of Pan American; Neilsen Edger, who has had experience in air transport as a test pilot and in a pilot, Lou Sauer, usually known as a helicopter test pilot; Joseph Farneth, a member of Marine Air Transport, and Amos J. Pease, director of Alaska Airlines. James will advise the new firm on *British* law.



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11. *What is the best way to manage the relationship between the government and the private sector?*



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TRANSPORT

U.S. Abandons 'Free Air' Policy; Approves Organization of ICAO

Chicago Plan scrapped for traffic bilateral agreement policy; Senate modified by action, votes for signing Civil Aviation Convention

Leaving the world-wide "free air" plan emanating at the 1944 Chicago Civil Aviation Conference as an ideal in the background, the United States took two forward steps on a realistic international air policy during last week.

1. Before a machinery to the Civil Aviation Convention establishing a permanent international civil aviation organization (ICAO) and international air navigation standards. The Senate ratified the convention, one of four agreements drawn up at Chicago, without opposition. ICAO, slated to succeed PIAO, the provisional international aviation organization, will start functioning as soon as there are 35 signatory nations. There are now 22.

2. Concerning the "free freedoms" agreement drafted at the Chicago conference as a last resort, the State Department announced formal withdrawal of the U.S. as a signatory. The agreement, looking to world-wide interchange of air traffic rights among the signatories, provided the "free freedoms" operating right—or the right to pick up traffic in a second country and carry it to a third, as well as to grant to a third nation stop rights for all signatory nations in the territories of all other signatory nations.

3. Back Home First—Of the 33 nations which have subscribed to the "free freedoms" agreement, only two aside from the U.S., have developed international air services—Sweden and the Netherlands. The U.S. had already negotiated a bilateral air agreement with Sweden supplementing the air arrangement agreed to between the two countries in signatures of the "free freedoms" agreement. A bilateral agreement with the Netherlands is now contemplated.

It has been obvious since last January that the Administration had abandoned the multilateral approach to achieve "free freedoms"

operating rights in other nations and was proceeding with a bilateral approach. Administration officials attributed to the change in policy new and wider use (Aviation News, March 18).

Official cognizance last week of the change in policy through withdrawal from the Chicago "free freedoms" agreement cleared a confused situation in which the U.S. was in the position of adhering to the multilateral approach and pursuing a bilateral approach. U.S. withdrawal from the agreement will not be an accomplished fact for another year since the terms of the pact require a year's advance notice of intent to withdraw.

4. Senate Approves—U.S. abandonment of the "free freedoms" agreement, was target of Congressional criticism of Administration air policy, elicited Senate opposition to ratification of the Civil Aviation Convention.

With the "free freedoms" agreement officially discarded, Congressional opposition to the Administration's air policy is now directed

against the 17 executive bilateral air agreements which have been negotiated with separate nations, and which carry out, pursuant to the "free freedoms" policy of occupancy of air traffic rights.

Initial aim of the opponents of the bilateral agreements is to require that they take the form of treaties, subject to two-thirds clearance by the Senate. A resolution adopted by the Senate Commerce Committee, 17 to 1, recommended this course.

5. No Change Likely—Estimates in this position that air agreements can legally take the form of executive agreements by Attorney General Tom Clark, the Administration has ignored the recommendation of the Senate Committee.

It is now evident that the Administration will not convert to the treaty form, unless forced to do so by a new law—a development likely only in the event of a Republican opposition majority in the new Congress.

By the time the new Congress convenes in January, it is expected that a majority—perhaps all—of the bilateral agreements which have been negotiated will have been repudiated. A Congressional law requiring that the already-concluded arrangements take the form of treaties, subject to Senate approval, would throw U.S. international aviation into confusion.

Of the two agreements drafted at the 1944 Chicago convention—an addition to the convention ratified last week and the "free freedoms" agreement repudiated—only the former is agreed to setting up ICAO, will be superseded by the conven-



FIRST CANADIAN-BUILT DC-4

Powered with British Rolls-Royce Merlin engines, this is the first DC-4 turned out by government-owned Canadian Ltd., Montreal, for Trans-Canada Airlines and the Department of National Defense, which have ordered 50 of the craft (Aviation News, July 27). Plans of Douglas aircraft with T-33 modifications, and carries 40 passengers. It was christened "North Star" by Mrs. C. D. Moore, wife of the Minister of Reconstruction and Supply. (Canadian Film Board photo.)



FROM DC-4 TO HELICOPTER:

Scenes like this showing transfer of mail from a United Air Lines DC-4 to a helicopter may be common along the carrier's routes if CAB grants its application for helicopter mail routes in the Chicago area, except that the helicopter would carry United's mail instead of the airway's. CAB has announced it will extend the routes to other large cities if CAB approves the Chicago application (AVIATION NEWS, July 29). Pictures above and taken at Lockheed Air Terminal as helicopter mail tests started in the Los Angeles area. (Scheidt photo)

CAB Counsel Scores Northeast's Finances

A CAB public counsel's memorandum on the Northeast Airlines mail route case has advised the Board that "it is apparent that NWA is now insolvent in the equity necessary to meet obligations on their routes". The memorandum also states that "public counsel is of the opinion that, in a large part at least, the financial difficulties of this carrier are the result of lack of managerial insight in estimating capital requirements".

NWA Wage Hearings Postponed for Ten Days

Protestful, fast-fading hearings in the union-management dispute at Northwest Airlines have been extended ten days, substantially slowing the date of any new strike by the International Association of Machinists from Aug. 3 to Aug. 13 (AVIATION NEWS, July 15). Both sides charged the other with stalling at the St. Paul hearings before the extension was agreed upon.

NWA officials assert that the carrier's mechanics average \$55.34 base pay a month and are seeing working hours cut by hours necessary to bring their wages to \$59.67 weekly. Their and NWA's average pay per mechanics is higher than that of any other airline and declared that union demands would cost \$800,000 annually.

for payment of such amounts approximated \$146,000. Almost \$85,000 is payable to the carrier at the proposed mail rate for services performed since May 1, 1948.

Mexico Balks U.S. Air Routes to South

Collapse of negotiations at Mexico City show it has not ratified in Latin American air routes.

Disagreements on fundamental problems of compensation as well as on specific routes to be allotted each country's carriers, U.S. and Mexican representatives have informed indefinitely their month-long civil aviation conference in Mexico City.

Unless new negotiations are initiated soon the break-up will have serious effects on plans of Brazil Airways, Eastern Air Lines and Western Air Lines to inaugurate service on routes opened by CAB in the Latin American decision.

McFarlin Predicted—Collapse of the meeting will result in a mail passageway from the start, with Mexico maintaining on a 54-33 division of passenger capacity and flight schedules across the border. This, in effect, would have meant that the Mexican carriers would be guaranteed carriage of half the passengers regardless of whether the passengers (predominantly U.S.) wished to use their own flag lines.

Mexico refused to authorize the carrier's route from San Antonio and Laredo to Monterrey and Mexico City and was reluctant to grant Western's route from Los Angeles

Braniiff's Blame

That E. Braniiff, president of Braniiff American Airlines, sought Pan American Airways and its Pan American subsidiary, Compania Mexicana de Aviacion (CMA), as basic partners responsible for the failure of the U.S. and Mexican mail and aviation conferences.

Said Braniiff: "The question of paramount importance on the conference which has adjourned unsuccessfully was whether the competitive airline situation was to be resolved in the public interest or in the interests of FAA and the Mexican government."

The memorandum estimated that on July 1, NWA's current accounts payable amounted to around \$100,000, and that cash on hand available



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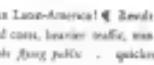
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Post Office Backing Spurs 'Copter Plans

Los Angeles mail experiment proposed toward end of 30 day mail test for better equipment seen.

The Post Office Department, in expressing satisfaction with the results of recently-conducted tests in the Los Angeles area, has moved step forward official backing of helicopter mail service used in connection with airmail.

Completion of the Los Angeles tests, conducted with six Army H-47s and H-52s—has not yet been submitted to Postmaster General Robert H. McArthur and Second Assistant Postmaster General Guilio Sestini pending their return from Europe. It is expected that they will summarize the Department's present evidence and testimony favorable to service in the Los Angeles area when route applications are heard by CAB examiners Sept. 8.

Next Application—Immediate result of the test is given the test,

embodied with the Post Office Department's first assertion that they were a success, probably will be a sharp increase in helicopter route applications from all sections of the country. First indication of such an upsurge is already apparent from a survey of new proceedings disclosed by CAB in the past six weeks. Most recent application, however, passenger and cargo service in addition to express or freight, thus posing operational considerations more than the current West Coast tests.

While the test disclosed the need for substantial modifications in routes and procedures, they also indicated the extent to which a helicopter specially built for mail picking and delivery work would be superior to the Army's rescue-type planes. Observers at the experiment believe that with a properly equipped plane stops would be reduced to a minimum.

Next Route—Showing over each outfitting post office, the helicopter would make the pick-up of assigned mail immediately after delivery for that point would be

Executive Bomber

Comments of a nearly new H-52 led to a passenger-cargo conversion proposal by Brig. Gen. T. E. Wilson, chairman of TWA's board of directors and managing director of the airline's International Division, was submitted for compilation last week.

Conclusion of the flying test follows the filing of a similar conversion made for General McArthur during the week of Aug. 20. Boeing Air and Space Co.'s Seattle plant early in July. General Wilson will use the plane in connection with his return to head of TWA's international operations.

dropped into a net. Consideration is also being given to a van conversion that a short time is necessary to install at each post office served by helicopter to enable the pilot to give word or his approach.

The Los Angeles experiment involved two main routes—one following the coast with Long Beach as its southern terminus, the other running inland to Bakersfield. A third route begins at Lockheed Air Terminal and terminates at Los Angeles post office. The Bakersfield route was also flown, the latter run being substantially successful.

Applications of three companies—Southwest Airways Co., Los Angeles Airways, Inc., and Terminal Airlines (Charles H. Babby), are included in the Sept. 8 hearings.

Ask New System

A new system for airport classification—rating by the number of operations per hour—has been proposed by the Air Transport Association in a manual published recently on the selection and layout of airports. The publication is the first of a series of new Airport Design Manuals which present the viewpoint of the scheduled airlines on the facilities they require.

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CAB ACTION

The 50th Annual Meeting of the International Air Transport Association, held in New York City, decided to take action to reduce the number of flights between the United States and Europe.

On Aug. 21, the CAB voted to reduce the number of flights between the United States and Europe.

On Aug. 22, the CAB voted to reduce the number of flights between the United States and South America.

On Aug. 23, the CAB voted to reduce the number of flights between the United States and Africa.

On Aug. 24, the CAB voted to reduce the number of flights between the United States and Australia.

On Aug. 25, the CAB voted to reduce the number of flights between the United States and Japan.

On Aug. 26, the CAB voted to reduce the number of flights between the United States and Canada.

On Aug. 27, the CAB voted to reduce the number of flights between the United States and Mexico.

On Aug. 28, the CAB voted to reduce the number of flights between the United States and South America.

On Aug. 29, the CAB voted to reduce the number of flights between the United States and South Africa.

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On Sept. 11, the CAB voted to reduce the number of flights between the United States and Australia.

On Sept. 12, the CAB voted to reduce the number of flights between the United States and Japan.

On Sept. 13, the CAB voted to reduce the number of flights between the United States and South America.

On Sept. 14, the CAB voted to reduce the number of flights between the United States and South Africa.

On Sept. 15, the CAB voted to reduce the number of flights between the United States and Australia.

On Sept. 16, the CAB voted to reduce the number of flights between the United States and Japan.

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On Jan. 22, the CAB voted to reduce the number of flights between the United States and South America.

On Jan. 23, the CAB voted to reduce the number of flights between the United States and South Africa.

On Jan. 24, the CAB voted to reduce the number of flights between the United States and Australia.

On Jan. 25, the CAB voted to reduce the number of flights between the United States and Japan.

On Jan. 26, the CAB voted to reduce the number of flights between the United States and South America.

On Jan. 27, the CAB voted to reduce the number of flights between the United States and South Africa.

On Jan. 28, the CAB voted to reduce the number of flights between the United States and Australia.

On Jan. 29, the CAB voted to reduce the number of flights between the United States and Japan.

On Jan. 30, the CAB voted to reduce the number of flights between the United States and South America.

On Jan. 31, the CAB voted to reduce the number of flights between the United States and South Africa.

On Feb. 1, the CAB voted to reduce the number of flights between the United States and Australia.

On Feb. 2, the CAB voted to reduce the number of flights between the United States and Japan.

On Feb. 3, the CAB voted to reduce the number of flights between the United States and South America.

On Feb. 4, the CAB voted to reduce the number of flights between the United States and South Africa.

On Feb. 5, the CAB voted to reduce the number of flights between the United States and Australia.

On Feb. 6, the CAB voted to reduce the number of flights between the United States and Japan.

On Feb. 7, the CAB voted to reduce the number of flights between the United States and South America.

On Feb. 8, the CAB voted to reduce the number of flights between the United States and South Africa.

On Feb. 9, the CAB voted to reduce the number of flights between the United States and Australia.

On Feb. 10, the CAB voted to reduce the number of flights between the United States and Japan.

On Feb. 11, the CAB voted to reduce the number of flights between the United States and South America.

On Feb. 12, the CAB voted to reduce the number of flights between the United States and South Africa.

On Feb. 13, the CAB voted to reduce the number of flights between the United States and Australia.

On Feb. 14, the CAB voted to reduce the number of flights between the United States and Japan.

On Feb. 15, the CAB voted to reduce the number of flights between the United States and South America.

On Feb. 16, the CAB voted to reduce the number of flights between the United States and South Africa.

On Feb. 17, the CAB voted to reduce the number of flights between the United States and Australia.

On Feb. 18, the CAB voted to reduce the number of flights between the United States and Japan.

On Feb. 19, the CAB voted to reduce the number of flights between the United States and South America.

On Feb. 20, the CAB voted to reduce the number of flights between the United States and South Africa.

On Feb. 21, the CAB voted to reduce the number of flights between the United States and Australia.

On Feb. 22, the CAB voted to reduce the number of flights between the United States and Japan.

On Feb. 23, the CAB voted to reduce the number of flights between the United States and South America.

On Feb. 24, the CAB voted to reduce the number of flights between the United States and South Africa.

On Feb. 25, the CAB voted to reduce the number of flights between the United States and Australia.

On Feb. 26, the CAB voted to reduce the number of flights between the United States and Japan.

On Feb. 27, the CAB voted to reduce the number of flights between the United States and South America.

On Feb. 28, the CAB voted to reduce the number of flights between the United States and South Africa.

"U.S. Forest Service Photo"



Checking a "smoke jumper's" gear before take-off. Note "catcher's mask" to protect face from hot branches in landing. Jumpers carry food and supplies for two days.

Bob Johnson, on the left, is rated one of the country's foremost mountain pilots. In addition to his "smoke jumping" service, Johnson leases planes for aerial game counts, ferries freight into isolated settlements, flies many rescue missions. Johnson Flying Service has used Texaco Aviation Products for many years.



JOHNSON FLYING SERVICE

"Smoke Jumping" HEADQUARTERS

TWENTY minutes after the first smoke of a forest fire is spotted, a plane takes off from Hale Field, Missoula, Montana, loaded with U.S. Forest Service "smoke jumpers" — specially trained fire-fighters who parachute down and get the fire under control before it reaches dangerous proportions. These "smoke jumper" planes are flown by skilled pilots of the Johnson Flying Service.

That's the spectacular side of Johnson Flying Service. Bob Johnson's daily job is to run one of the best equipped airport operations in the Northwest . . . where private flyers can enjoy the benefit of well-organized, capable service . . . modern hangars, fine runways, complete repair and overhaul facilities, and the aviation fuels and lubri-

cants that are preferred everywhere — *Texaco*.

Bob Johnson is a veteran pilot and one of the Northwest's aviation pioneers. Over the years *Texaco Aviation Gasoline* and *Texaco Aircraft Engine Oil* have been his standbys . . . just as they are today at progressive airports all over the country. Leading airlines, too, prefer Texaco. In fact — *more revenue airline miles in the U.S. are flown with Texaco Aircraft Engine Oil than with any other brand!*

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FOR THE AVIATION INDUSTRY

TUNE IN THE TEXACO STAR THEATRE WITH JAMES MELTON EVERY SUNDAY NIGHT—CBS